Claims

- 1. (currently amended) A germline-competent black B6 ES C57BL/6 ES cell line form from C57BL/6 mouse strain wherein said ES cell line consists consisting of IC1.
- (currently amended) A germline-competent albino B6 ES C57BL/6 ES
 cell line from C57BL/6J-Tyr e-23 C57BL/6J-Tyr c-2J mouse strain, wherein said ES cell line consists consisting of IAC1.
- 3. (currently amended) A method of generating a chimeric transgenic

 C57BL/6 mouse for producing genetically modified C57 mice, wherein said chimeric transgenic mouse comprising:

 is produced by introducing C57 ES cells with marker genes into blastocysts from the same color strain, and transplanting said blastocysts into a pseudopregnant animal to produce the chimeric mouse which can not be seen by coat color.
 - a) introducing a transgene construct that is stably integrated in the genome of C57BL/6 ES cells into blastocysts from the same color strain,
 - b) transplanting said blastocysts into a pseudopregnant animal to produce a chimeric transgenic mouse, and
 - c) breeding the chimeric mouse to produce a homozygous transgenic mouse comprising said transgene construct.
- 4. (cancelled)
- 5. (currently amended) A method of introducing albino C57BL/6 B6 ES cells

into black B6 C57BL/6 blastocysts to produce a white into black combination, said method comprising the steps of:

- a) introducing genetic modification in albino B6 a transgene construct into albino C57BL/6 ES cells to produce modified ES cells,
- b) introducing said modified <u>albino C57BL/6 ES cells into black C57BL/6</u>
 <u>blastocysts</u>, <u>B6 ES cells into blastocysts from black C57 strain</u> and transplanting said blastocysts into a pseudopregnant mouse,
- c) allowing said blastocyst to develop into ehimeras chimeric transgenic mouse identified by coat color, and
- d) breeding said chimeras to produce offspring chimeric transgenic mouse to produce a homozygous transgenic mouse comprising said transgene construct.
- 6. (currently amended) The method of claim 3 wherein the <u>presence of the transgene ehimerism</u> is identified by PCR and Southern Blot, said chimerism being not identifiable by coat color when C57 ES cells are injected into C57 blastocysts of the same color strain.
- 7. (currently amended) The method of claim 3 wherein black B6 C57BL/6
 ES cells are introduced into black B6 C57BL/6 blastocysts to produce a black into black combination.
- 8. (currently amended) The method of claim 6 wherein black C57BL/6 B6

 ES cells are introduced into black C57BL/6 B6 blastocysts to produce a black into black combination.
- 9. (cancelled)
- 10. (cancelled)
- 11. (cancelled)